

What is claimed is:

Sub A4  
5 1. A tension mask assembly for a cathode ray tube comprising:  
a mask frame including a first pair of frame members disposed at opposite ends, respectively, of said mask frame;  
a plurality of mask strands disposed between said pair  
10 of frame members and affixed to said pair of frame members in a manner to produce tension in said mask strands; and  
a third member for supporting said plurality of mask strands in a first intermediate region of said mask  
15 strands, between said pair of frame members.

20 2. A tension mask assembly according to Claim 1 wherein said third member is disposed in a direction parallel to a direction of one of said pair of frame members and closer to said one of said pair of frame members than to the other one of said pair of frame members.

25 3. A tension mask assembly according to Claim 2, further comprising a fourth member for supporting said plurality of mask strands in a second intermediate region of said mask strands, between said pair of frame members, wherein said fourth member is closer to said other of said pair of frame members than to said one of said pair of  
30 frame members.

35 4. A tension mask assembly according to Claim 1, wherein said mask strands are made of an etched strand material.

5. A tension mask assembly according to Claim 1, wherein, in a stand alone state, said plurality of mask

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strands are connected to each other with an unetched strand material on each end.

6. A tension mask assembly according to Claim 1  
5 wherein said third member is disposed perpendicularly to said mask strands.

7. A tension mask assembly according to Claim 1,  
wherein a second pair of frame members are affixed to said  
10 first pair of frame members to form said mask frame having a rectangular shape.

8. A tension mask assembly according to Claim 1  
15 wherein said third member and said fourth member apply a frictional force to said mask strands.

9. A tension mask assembly according to Claim 1  
wherein said third member is attached to said mask strands by an adhesive.

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10. A method for forming a tension mask assembly, comprising the steps of:

- (a) providing a tension mask with a plurality of etched mask strands disposed vertically between two  
25 respective end regions;
- (b) affixing a plurality of barrier ridge elements to the tension mask; and
- (c) affixing the tension mask.

30 11. The method of claim 10 further comprising the step of aligning the barrier ridge elements perpendicular to the mask strands.

35 12. The method of claim 10 further comprising the step of aligning the mask strands and the barrier ridge elements to the mask frame perpendicular to the mask strands and the barrier ridge elements.

Sub A5

Sub A6

Sub A7

13. The method of claim 10 further comprising the step of trimming the mask strands flush to the outer portion of a mask frame assembly after the mask strands are  
5 affixed to the mask frame.